

Remarks/Arguments

The Applicants respectfully appreciate the telephone interview with the Examiner on September 19th.

Reconsideration of the above-identified application in view of the present amendment is respectfully requested.

By the present amendment, claims 11 and 12 have been amended to include the limitation that “the particles” provide a static friction at the intersections between the warp and weft threads that is at least 5% greater than that of an untreated fabric having the same construction. Support for this limitation can be found on page 3, lines 5 to 9 of the specification.

Claims 11, 3-10, 19-20, and 12 were rejected under 35 USC §103 as being obvious in view of U.S. Patent No. 6,458,724 (hereinafter, “the ‘724 patent”) and U.S. Patent No. 6,140,414 (hereinafter, “the ‘414 patent”).

Claim 11 is patentable over the ‘724 patent in view of the ‘414 patent because the ‘724 patent in view of the ‘414 patent do not teach or suggest: (1) mechanically incorporating at least one of crystalline and amorphous particles of incombustible inorganic material in at least some of the openings between the warp and weft threads of the fabric, and (2) the particles provide a static friction at the intersections between the warp and weft threads that is at least 5% greater than that of an untreated fabric having the same construction.

1. The '724 patent in view of the '414 patent do not teach or suggest mechanically incorporating at least one of crystalline and amorphous particles of incombustible inorganic material in at least some of the openings between the warp and weft threads of the fabric.

The '414 patent, which is relied on by the Office Action to teach the limitation of mechanically incorporating particles between the warp and weft threads, does teach or suggest that particles are incorporated in at least some openings between the warp and weft threads of the fabric. The '414 patent merely states in column 7 that a silicone surface coating comprising colloidal silica particles is coated on the substrate fabric. There is nothing in the '414 patent that teaches or suggests that the surface coating and particularly the colloidal silica particles provided in the surface coating infiltrate the texture of the fabric.

In fact, the '414 patent teaches away from incorporation of the silicone coating, and hence the colloidal silica, in the openings between the warp and weft threads of the fabric. The '414 patent teaches at column 7, lines 52-63, the silicone coating composition requires an increased viscosity before coating a substrate cloth in order to ensure good performance of the airbag cloth because:

“when the viscosity of the coating liquid is inadequately low, the coating liquid applied to the surface of the substrate cloth infiltrates the texture of the substrate cloth throughout and is cured in situ so that the surface-coated base cloth would have unduly high stiffness not suitable as a material of airbags along with problems relative to the gas-sealing behavior and flame retardancy of the base cloth...”

Thus, the '414 patent teaches not to infiltrate the texture of the substrate cloth in order to avoid unduly high stiffness after curing the silicone. Therefore, the '414 teaches away from incorporating colloidal silica in the openings between the warp and weft threads of the fabric.

2. The '724 patent in view of the '414 patent do not teach or suggest the particles provide a static friction at the intersections between the warp and weft threads that is at least 5% greater than that of an untreated fabric having the same construction.

The '414 patent, which is relied on to teach the incorporation of the particles into openings between the warp and weft threads, does not teach or suggest that the colloidal silica particles increase the static friction at the intersections between the warp and weft weave. As discussed above, the colloidal silica particles of the '414 patent are provided in a silicone composition that is provided as a surface coating on a fabric. There is nothing in the '414 patent to suggest that these particles are incorporated in openings between the warp and weft threads let alone increase the static friction at the intersection.

Additionally, the applicant's representative fails to see how colloidal silica particles provided in a silicone surface coating could potentially increase the static friction at the intersections of the warp and weft threads. Assuming arguendo, if anything in the '414 patent could potentially increase the static friction at the intersections between the warp and weft threads, it would be the silicone polymer that provides the polymer matrix of the surface coating not the particles. Thus, '414 cannot be relied on to teach or suggest the limitation of

providing particles to increase the static friction at least 5% at the intersection of the warp and weft threads.

The '724 patent also does not teach or suggest incorporating particles to increase the static friction at the intersection between the warp and weft threads because the '724 patent does not teach or suggest incorporating particles into intersection between the warp and weft threads.

Claims 2-9 and 19-20 depend from claim 11 are therefore allowable because of the aforementioned deficiencies in the rejection with respect to claim 11 and because the specific limitations recited in claims 2-9 and 19-20.

Claim 12 recites an airbag fabric that comprises intersecting warp and weft threads made of at least one of synthetic fibers and filaments and woven at such a density that openings remaining between their intersections yield an at least microporous structure in the fabric. At least one of crystalline and amorphous particles are incorporated in at least some of the openings. The particles provide a static friction at the intersections between the warp and weft threads that is at least 5% greater than that of an untreated fabric having the same construction.

Claim 12 is patentable over the '724 patent in view of the '414 patent because the '724 patent in view of the '414 patent do not teach or suggest the particles provide a static friction at the intersections between the warp and weft threads that is at least 5% greater than that of an untreated fabric having the same construction.

As discussed above with respect to claim 11, the ‘414 patent, which is relied on to teach the incorporation of the particles into openings between the warp and weft threads, does not teach or suggest that the colloidal silica particles increase the static friction at the intersections between the warp and weft weave. The colloidal silica particles of the ‘414 patent are provided in a silicone composition that is provided as a surface coating on a fabric. There is nothing in the ‘414 patent to suggest that these particles are incorporated in openings between the warp and weft threads let alone increase the static friction at the intersection.

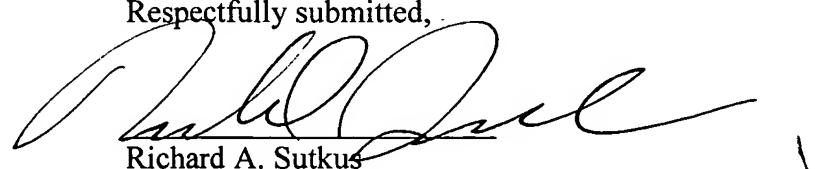
Additionally, as discussed above, the applicant’s representative fails to see how colloidal silica particles provided in a silicone surface coating could potentially increase the static friction at the intersections of the warp and weft threads. Assuming arguendo, if anything in the ‘414 patent could potentially increase the static friction at the intersections between the warp and weft threads, it would be the silicone polymer that provides the polymer matrix of the surface coating not the particles. Thus, ‘414 cannot be relied on to teach or suggest the limitation of providing particles to increase the static friction at least 5% at the intersection of the warp and weft threads.

The ‘724 patent also does not teach or suggest incorporating particles to increase the static friction at the intersection between the warp and weft threads because the ‘724 patent does not teach or suggest incorporating particles into intersection between the warp and weft threads.

In view of the foregoing, it is respectfully submitted that the above-identified application is in condition for allowance, and allowance of the above-identified application is respectfully requested.

Please charge any deficiency or credit any overpayment in the fees for this amendment to our Deposit Account No. 20-0090.

Respectfully submitted,



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